

Notice of Allowability	Application No.	Applicant(s)
	10/748,833	ANDERS ET AL.
	Examiner	Art Unit
	Jason Crawford	2819
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  1. ☑ This communication is responsive to 10/26/06.  2. ☑ The allowed claim(s) is/are 1-2, 4, 6-7, 9-12 and 14-16.  3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
<ul><li>5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.</li><li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached</li></ul>		
(a) ☐ including changes required by the Notice of Draitsperson's Patent Drawing Neview (1 10-345) attached  1) ☐ hereto or 2) ☐ to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ol>		
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal P 6. ☐ Interview Summary Paper No./Mail Dat 7. ☐ Examiner's Amenda 8. ☑ Examiner's Stateme 9. ☐ Other	(PTO-413), re

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## **DETAILED ACTION**

## Miscellaneous

The Applicant has cancelled claims 3, 5, 8 and 13; therefore only claims 1-2, 4, 6-7, 9-12 and 14-16 remain for this Office Action.

## Allowable Subject Matter

Claims 1-2, 4, 6-7, 9-12 and 14-16 are allowed. The following is an examiner's statement of reasons for allowance:

In regards to claim 1, the prior art discloses of a circuit comprising a static low-swing driver circuit to receive a full-swing input signal to convert the full-swing input signal to a low-swing input signal and to transmit the low-swing input signal, and a dynamic receiver circuit to receive the low-swing input signal and to convert the low-swing input signal, however, the prior art does not directly disclose of a driver circuit with an inverter and delay element coupled to an input line wherein the output of the inverter goes to a gate of a first transistor that has <u>a drain coupled to a first voltage that is lower than the supply voltage</u> and a second transistor that has a gate coupled to the output of the delay element wherein the <u>drain of the second transistor is coupled to the source of the first transistor</u>, nor would it have been obvious to one of ordinary skill in the art to do so. Claims 2, 4 and 6-7 are also allowed as being dependent on claim 1.

In regards to claim 9, the prior art does not directly disclose of a driver circuit with an inverter and delay element coupled to an input line wherein the output of the inverter goes to a gate of a first transistor that has a drain coupled to a first voltage that is lower

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than the supply voltage and a second transistor that has a gate coupled to the output of the delay element wherein the <u>drain of the second transistor is coupled to the source of the first transistor</u>, nor would it have been obvious to one of ordinary skill to do so.

Claim 10 is also allowed as being dependent on the allowable claim 9.

In regards to claim 11, the prior art discloses of a circuit comprising a static low-swing driver circuit to receive a full-swing input signal to convert the full-swing input signal to a low-swing input signal and to transmit the low-swing input signal and a dynamic receiver circuit to receive the low-swing input signal and to convert the low-swing input signal to a full-swing signal wherein the circuit is comprised within a processor unit coupled to a double data rate memory, however, the prior art does not directly disclose of a driver circuit with an inverter and delay element coupled to an input line wherein the output of the inverter goes to a gate of a first transistor that has a drain coupled to a first voltage that is lower than the supply voltage and a second transistor that has a gate coupled to the output of the delay element wherein the drain of the second transistor is coupled to the source of the first transistor, nor would it have been obvious to one of ordinary skill in the art to do so. Claims 12, 14 and 15 are also allowed as being dependent on claim 11.

In regards to claim 16, the prior art discloses of a circuit comprising a static low-swing driver circuit to receive a full-swing input signal to convert the full-swing input signal to a low-swing input signal and to transmit the low-swing input signal, and a dynamic receiver circuit to receive the low-swing input signal and to convert the low-swing input signal, however, the prior art does not directly disclose of the receiver

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comprises an input line, an inverter coupled to V<sub>SS</sub> and to a first voltage less than V<sub>SS</sub>, the inverter coupled to a clock signal and a pull-up transistor coupled to the output of the inverter and to V<sub>CC</sub>, nor would it have been obvious to one of ordinary skill in the art to do so.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Crawford whose telephone number is 571-272-6004. The examiner can normally be reached on Monday - Friday 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rex Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have guestions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**JMC** 

REXFORD BARNIE SUPERVISORY PATENT EXAMINER

12/19/06